Community & Cultural Affairs

ANNUAL REPORT

1988

89-02768/

PRINCE EDWARD ISLAND

Department of Community & Cultural Affairs

ANNUAL REPORT

For the fiscal year ended March 31, 1988, and for activities to December 31, 1988.

Gilbert R. Clements
Minister

Kenneth F. DesRoches
Deputy Minister

Community & Cultural Affairs

The Honourable Lloyd G. MacPhail
Lieutenant Governor
Province of Prince Edward Island

May It Please Your Honour:

I have the honour to submit herewith the Annual Report of the Department of Community and Cultural Affairs for the fiscal year ended March 31, 1988, and activities for the period January 1 to December 31, 1988.

Your obedient servant,

Gilbert R. Clements
Minister

Community & Cultural Affairs

The Honourable Gilbert R. Clements
Minister
Department of Community and Cultural Affairs
Province of Prince Edward Island

Sir:

It is my pleasure and honour to submit to you the Annual Report of the Department of Community and Cultural Affairs for the year ended December 31, 1988.

Respectfully submitted,

Kenneth F. DesRoches
Deputy Minister

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Deputy Minister's Acknowledgement

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MANAGEMENT SERVICES DIVISION

Management Services Division is responsible for the financial, personnel, and computer operations of the Department.

Financial services include preparation of the annual budget, maintaining budget control, and processing/authorizing all payments for goods, services, and grants.

Personnel services involves all aspects of personnel administration within the Department. This includes participation in the recruitment and selection of employees, maintenance of personnel records, administration of the **Civil Service Act and Regulations**, administration of the collective agreement between the Province of P.E.I. and the P.E.I. Union of Public Sector Employees, and the provision of information to staff on personnel issues.

Computer services entails the co-ordination of computer systems in the development and implementation of applications to be computerized. A Computer Committee chaired by the Management Services Director with representatives from each Division monitors the development of computer technology within the Department.

FINANCIAL SUMMARY
COMMUNITY & CULTURAL AFFAIRS
REVENUE AND EXPENDITURES
(FOR THE YEAR ENDED 31 MARCH 1988)

EXPENDITURES		
General Administration		525,366
Planning Services		
Administration	496,048	
Community Planning	28,222	524,270
Youth, Fitness & Recreation		1,856,784
Municipal Support		4,991,116

Cultural Affairs		
Administration	115,735	
Grants	1,244,685	
PEI Museum & Heritage	559,300	
Arts Policy Task Force	5,707	1,925,427
Building & Development		
Administration	757,573	
Derelict Cars/ Dilapidated Bldgs.	73,601	831,174
Environmental & Technical Services		
Administration	443,387	
Provincial Solid Waste	801,897	
Community Dumps	207,025	
Marine Environment	59,694	
Conservation Strategy	191,472	
Water Resources	248,489	
Community Services Lab.	176,328	
Underground Petroleum Storage Tank Pgm.	141,103	
Water Management	161,223	2,430,618
Fish & Wildlife		
Administration	544,901	
Wetland Management Pgm.	17,434	
Fisheries	70,775	
Upland Game	6,175	
Waterfowl & Furbearers	9,089	
Hunter Safety	6,699	
Co-operative Watershed Management	137,002	
Trapper Education	2,443	794,518
Emergency Measures Organization		
Administration	42,126	
Joint Emergency Planning Program	113,458	155,584
TOTAL EXPENDITURES		14,034,857

REVENUES		
Administration		103
Building & Development		
Inspection Fees	53,329	
Derelict Cars	45,358	
Other	808	99,495
Environmental & Technical Svs.		
Utility Operations	12,685	
Sandmining	2,299	
Provincial Lab. Services	1,600	
Underground Storage Tank Program	84,500	
Other	12	101,096
Fish & Wildlife		
Fish & Game Licenses	154,743	
Wetland Management Program	17,436	
Co-operative Watershed Program	124,422	
Other	4,273	300,874
Emergency Measures Organization		
Joint Emergency Planning Programs		169,267
TOTAL REVENUE		670,836

PLANNING AND CO-ORDINATION DIVISION

The purpose of the Division is to co-ordinate the Department's short term and strategic planning initiatives. A primary goal was achieved this past year with the establishment of a planning process that integrates the priorities of the Department with divisional objectives and the allocation of resources through the annual budget. Specific objectives of the Division are:

- to co-ordinate departmental planning;
- to assist the Department's Management Committee in fulfilling its terms of reference;
- to co-ordinate the Department's intergovernmental relationships;
- in conjunction with Management Services, to establish a management information system for the Department;
- to co-ordinate departmental submissions to Executive Council, Policy Board, and Treasury Board, including the development of new initiatives, the strategic overview, the legislative program, and the budget support package;
- to undertake, as directed, the evaluation of departmental policies and programs.

CULTURAL AFFAIRS DIVISION

The Division is responsible for the promotion and support of the many aspects of Island culture, including heritage, museums and archives, the arts, cultural enterprise development, multiculturalism, and community schools. Support is provided through direct administration, policy and program development, financial and professional assistance.

Cultural Policy Development

In 1988 the Division completed major reviews of existing cultural policies, affecting the arts, heritage, and multiculturalism.

The Provincial Arts Policy Task Force submitted its report to the Minister in October, and its recommendations are now being studied. In 1989 the Division, in further consultation with the arts community, will develop a provincial arts policy.

In the era of heritage the special Heritage and Museums Policy Committee, comprised of various agency representatives, also submitted its report to the Minister, and Government has been asked to consider its recommendations.

Prince Edward Island's new Multicultural Policy was adopted by Government in March of 1988, and a Ministerial Advisory Committee on Multiculturalism was established under the chairmanship of Mr. Jacob Mal of Charlottetown.

ERDA Planning

The Department continued its efforts in 1988 to secure sub-agreement with the Federal Government, under the general ERDA, based on the results of a major Federal-Provincial study which clearly demonstrates the economic impact of cultural activities.

Such a funding agreement remains a Divisional and Provincial priority in 1989, as discussions continue among the Department of Community and Cultural Affairs, the Federal Department of Communications, and the Atlantic Canada Opportunities Agency (ACOA).

Public Archives

Administrative responsibility for the operation of the Public Archives was assigned to the Division in 1988, further consolidating Government's operational mandate in the historical resources field.

The Archives will implement a new Public Records Management Program in 1989, designed to care for government documents on an ongoing and systematic basis.

Cultural Industries Support

The Department continued to assist Island cultural businesses in 1988 under the "Cultural Product Development Fund". Projects supported included George Brothers' "Atlantic Sons and Daughters" audio cassette (Sound Ventures), the French-English audio production of Deirdre Kessler's popular children's story "Lobster in my Pocket" (York Point Productions), and original Island stage plays developed by Victoria Playhouse, and King's Playhouse, Georgetown.

Acadian/Francophone Support

In 1988 the Division gained bilingual capability in its central administration with the hiring of Mr. Jean-Louis Arsenault as Bilingual Cultural Affairs Officer, under the recent bilingual services agreement between Prince Edward Island and the Federal Secretary of State.

Mr. Arsenault will be working closely with the Island's francophone communities, and is responsible for administering the Division's new "Acadian Cultural Support Program". This program make available grant assistance on a project basis to groups and individuals.

Operating Support to Agencies/Organizations

Government support to provincial cultural agencies and organizations totalled $1,205,400 in 1988.

The Prince Edward Island Museum and Heritage Foundation is the provincial agency responsible for museums and historical resource development, including the

administration of four branch museums and a variety of other public programs and services (i.e. exhibitions, genealogy, publishing, architectural conservation). The visitation statistics at provincial branch museums in 1988 were as follows:

Green Park Shipbuilding Museum	8,559
Eptek National Exhibition Centre (Summerside)	24,436
Beaconsfield (Genealogy Services)	2,424
Orwell Corner Rural Life Museum	11,355
Basin Head Fisheries Museum	8,015
Elmira Railway Museum	2,407
TOTAL	57,196

The Division continued to support smaller community museums in 1988 by core-funding the operations of the Community Museums Association, a provincial organization dedicated to staff training and the general improvement of local museums.

In addition, the Department and the Association co-sponsored a Summer Conservation Program in which the Province's new mobile home lab toured approximately 16 museums across the Island between June and September, assessing collections and providing basic advice on the care and treatment of artifacts. This summer program was extremely successful and will be continued in 1989.

The Prince Edward Island Council of the Arts, the provincial arts granting agency funded by the Department, awarded grants to 21 individuals and 35 groups in 1988, totalling $63,700.

The Council's second annual Island-wide Arts Festival took place in September and was again a success.

The Department also provided assistance to five regional arts councils across the Province involved in promoting the arts at the local level.

Theatre Prince Edward Island, a provincial theatre agency core-funded by the Department and the University, had another successful year. Highlights included the creation of a new Island work entitled, "Belfast People", a provincial tour of the musical "Quilters", the New Voices Playwright Competition, and the beginnings of a successful fundraising campaign.

Finally, the P.E.I. Association of Community Schools once again received grant assistance from the Department in 1988, to help operate its unique winter program of community-focussed adult education. Department support enable the Association to employ a provincial co-ordinator and to sponsor preparatory workshops.

Fathers of Confederation Buildings Trust

The Fathers of Confederation Buildings Trust (Confederation Centre of the Arts), is Canada's only national memorial to the Fathers of Confederation. It is an arts centre with local, regional, and national stature. Moreover, the annual Charlottetown Festival is Prince Edward Island's single most important tourist attraction. In 1988 the Department provided operating and capital grant assistance to the Centre totalling $768,000.

YOUTH, FITNESS AND RECREATION DIVISION

A primary objective of the Division is to encourage all residents of the Province to make productive, healthful use of their leisure time. Such encouragement is offered through financial assistance, consultative services, leadership development, and direct programming being provided to approximately 150 youth, fitness, sport and recreation agencies and organizations at the community, regional, and provincial levels.

Recreation

The Community Recreation Support Program was the cornerstone of the Division's support of recreation in 1988.

Through this program 20 artificial ice arenas and 2 natural ice arenas received financial assistance. As well, 13 communities received financial contributions in support of the employment of full-time recreation directors.

One of the highlights of the year was the development of a pilot project under which the communities of Clyde River, Cornwall, Eliot River, Meadowbank, and North River united to form the Eliot River Area Recreation Committee and to employ a full-time recreation director to serve all residents of the area.

The Facility Improvement component of the C.R.S.P. provided support to 30 communities in their efforts to upgrade their recreation facilities.

Through the administrative and support section of the Community Recreation Support Program, 19 communities were provided with financial assistance in support of administrative programs and projects.

The regional staff of the Division continue to provide consultative and secretarial support to community recreation groups.

The Division continues in its support of the P.E.I. Recreation Association, the Provincial Facilities Managers Association, the P.E.I. Recreation and Sport Association for the Physically Challenged, through

providing financial contributions, consultative and administrative support, as well as co-operating very closely in the planning, organizing and staging of workshops by these groups.

Allied Youth

In 1988, Allied Youth continued to be active at the local, regional, provincial, and international levels. Currently there are 12 senior, 19 junior and 4 community Allied Youth Posts in schools and communities across the Province. The total membership in the Program is in the vicinity of 1000 young people between the ages of 12 and 18.

A first joint Provincial Conference of Junior and Senior members was held in May at the University of Prince Edward Island with approximately 250 in attendance. During the conference, Erin Dunn of Alberton was elected Provincial President, while Pat Gaudet of Kinkora was elected Provincial Mr. AY. Julie Warren, a member of the Three Oaks Senior Post, was named International Exchange Delegate who travelled to Newfoundland for the month of July.

Betty Ann Bernard of the St. Eleanors Senior Post was presented with the Most Outstanding AY'er Award, while Merilyn Carew from O'Leary Junior Post was honoured with the David M. Boswell Award for the Most Outstanding AY Advisor.

The Lillian Livingstone Award for Best Senior Post was presented to Ellerslie, as well as the Alumni Best Scrapbook Award.

The Hazel B. MacPhee Memorial Award for Best Junior Post was presented to Cardigan, and the Karen Corcoran Award for the Most Improved Post was presented to St. Edwards Senior Post.

Over 60 Senior members attended the first ever Provincial Senior Mini-Leadership Conference held at the Dutch Inn in Charlottetown. Scott Wilson of Charlottetown was elected as the International Representative, and Lynn MacDonald of West Point was elected Miss AY.

The 1988 International AY Conference was held at the Old Orchard Inn in Wolfville, Nova Scotia, in November, with over 60 Island delegates in attendance. Among the highlights was the selection of the Cardigan Junior AY Post as the first-time recipients of the Most Outstanding Junior International AY Post and Merilyn Carew as the recipient of the Merritt Smith Memorial Award as the Most Outstanding International Advisor-Sponsor. Ellerslie Senior AY Post was awarded first place in the Ed Evans Memorial Fund Award, while Ellerslie's Advisor, Doug MacDougall, was elected Chairman of the International Board of Trustees. Scott Wilson of Charlottetown was elected International AY Vice-President.

During the year, 300 Grade 11 and 12 students were trained under the Peer Education Program.

Each of these high school students delivered a combined drug and alcohol program to Grade 7 students across the Province. Some 1,975 students were recipients of this Program.

The Division continues to relate to Red Cross, YMCA, Student Council, Boys and Girls Clubs, Boy Scouts, Girl Guides, and various other youth agencies and organizations.

A highlight of the year for the Duke of Edinburgh Program occurred when 11 young people were presented their Bronze Award and 6 young people were presented their Silver Award by His Honour Lieutenant Governor Lloyd MacPhail during a ceremony at Government House in November.

Fitness

Throughout the past year the Division continued its promotion of fitness.

Planning and organizational meetings were held with representatives from other appropriate departments in the interest of establishing an interdepartmental committee on healthy lifestyles.

As well, the Division was involved in a co-operative program with Participaction which was designed to promote fitness in the workplace.

The Division co-ordinated National Fitweek activities in the Province. Sneaker Day again proved to be the most participated-in event during the week. Events were scheduled in communities throughout the Province, as well as in a number of schools.

In co-operation with the Provincial Fitness Leaders Committee, a Level I workshop was conducted with approximately 25 fitness leaders in attendance.

Amateur Sport

Forty eight (48) provincial sport governing bodies received financial and consultative assistance from the Division. A revised policy on amateur sport support was well received by the sport community.

Sport P.E.I., the provincial sports federation, continued to provide administrative support services to its membership and was successful in generating in excess of $60,000 in its fund raising efforts on behalf of amateur sport in the Province.

Best Ever Program

The Best Ever Program, implemented in 1988, is designed to provide financial and administrative assistance to provincial teams preparing for the 1991 Canada Winter Games. Also, it is designed to be utilized in the development of technical officials for the Games; as well as to assist provincial sport governing bodies involved in the 1991 Winter Games in the area of organizational development.

The Provincial Canada Games Committee selected and appointed the Canada Games coaches for the sports of badminton, boxing, nordic skiing, curling (men and women), fencing, figure skating, artistic gymnastics, hockey, judo, racquetball, ringette, shooting, squash, table tennis, synchronized swimming, and weightlifting. Talent identification and recruitment camps were held at locations across the Province. These provided team officials with the opportunity to assess potential team members.

Consideration was given to the Province's participation in the sports of biathlon, rhythmic gymnastics, speed skating, and weightlifting. During the year contracts

were established, both nationally and regionally, which have enabled initial planning to begin for possible participation by P.E.I. in these sports.

Several sports involved in the 1991 Canada Games were involved in competitions both on and off the Island. The results of these competitions have been most positive.

Coaching and officiating development programs have commenced. This has resulted in an overall increase in the number of nationally certified coaches and officials working toward the 1991 Canada Games.

Sport P.E.I. was engaged to carry out the organizational development component of the Best Ever Program.

1989 Canada Summer Games

The members of the Provincial Mission Staff were appointed by the Minister of Community and Cultural Affairs. For the first time there will be an equal number of men and women on the Mission Staff. Mission members are:

> Judy Helps, Velma Richard, Marion Grant, Jill Richardson, Joanne MacDonald, Sue Hendricken, Stan Porter, Brian McFeely, Ted Lawlor, John Morrison, George Morrison, and Chef-de-Mission, Cletus Dunn.

The team coaches and managers were selected and appointed by the Provincial Canada Games Committee Inc. Individual teams received financial assistance to enable them to begin selection and training of their teams, and to be involved in pre-Games competitions.

The Provincial Canada Games Committee continued to provide direction and leadership and have adopted policies to reflect a change in direction in the selection of coaches and managers.

The fund raising sub-committee, chaired by Mr. Jim Hogan, was successful in raising approximately $15,000 in support of the Island athletes.

The 1989 Canada Games pin was designed by Wayne Wright of Summerside, and the walk-out dress was designed by Colleen McCarville of Borden and Elaine Kenny of Charlottetown.

The Provincial Chef-de-Mission, Cletus Dunn of Brooklyn, attended the planning meeting of Chefs-de-Mission held in Saskatoon in June and expressed satisfaction with the community support and sport governing body co-operation being exhibited in the preparations for 1989.

Leadership

The Division continued its involvement in leadership programs for volunteers in the leisure sector.

Approximately 25 courses of the Skills Program for Management Volunteers were held at various locations throughout the Province.

One Master Course Conductor and 9 Course Conductors were trained in the National Coaching Certification program. This will enable the Province to deliver Levels One and Two of the revised Theory component of this Program. Additionally, a number of Theory and Technical Coaching courses were held during the year.

COMMUNITY SERVICES DIVISION

The Community Services Division is primarily responsible for providing professional and technical services to all areas of the Province with respect to land use planning, building and development standards, municipal administration and emergency measures.

The Division consists of the following branches: Community Planning, Provincial Planning, Building and Development, Municipal Affairs, and the Emergency Measures Organization.

Community Planning Branch

During 1988, staff of the Community Planning Branch delivered a program consisting of:

> Technical and professional planning assistance to municipalities;
>
> Project planning assistance to community organizations and government field staff;
>
> Municipal affairs advisory services to councils and administrators, and special planning area activities.

In addition to these varied program activities, the Community Planning Branch was also involved in numerous policy matters. This included the 1988 **Planning Act** itself, provincial planning policy research, and the publication of guidelines and other information for municipalities involved in planning.

A large proportion of the Branch's staff resources was directed toward municipalities and planning areas. Work was undertaken with councils, committees, and planning boards on official plans, bylaws and administration. Technical and professional services were given on request. This enabled planning boards and committees to carry out their assignments as given by local and provincial governments. In the following table, the current planning status is shown for those communities which are engaged in planning programs. Activities which are indicated as in progress or under review represent substantial investments in human resources.

LOCATION	STATUS
Charlottetown	Master Plan and Bylaws
Summerside	Development Bylaws
Greater Charlottetown	Official Plan and Regulations
Environmental District	Review
Cavendish Special Planning	Official Plan (in progress)
Alberton	Official Plan and Bylaws
Alexandra	Official Plan & Bylaws (review)
Brackley	Official Plan and Bylaws (in progress)
Brudenell	Official Plan (in progress)
Bunbury	Official Plan and Bylaws (review)
Cornwall	Official Plan and Bylaws (review)
Cross Roads	Official Plan and Bylaws
East Royalty	Official Plan and Bylaws (review)
Georgetown	Plan and Development Bylaws
Kensington	Development Bylaws Review
Keppoch-Kinlock	Official Plan and Bylaws
Hillsborough Park	Official Plan (in progress)
Abrams Village	Official Plan (in progress)
Borden	Official Plan (in progress)
Hunter River	Official Plan (in progress)
Eliot River	Official Plan (in progress)
Kinkora	Official Plan and Bylaws
Linkletter	Official Plan and Bylaws

Lower Montague	Official Plan and Bylaws
Miltonvale Park	Official Plan and (review)
Montague	Development Bylaws
New Haven-Riverdale	Official Plan and Bylaws
North River	Official Plan and Bylaws
North Shore	Official Plan (in progress)
O'Leary	Official Plan and Bylaws (in progress)
Parkdale	Official Plan and Bylaws
St. Eleanors	Official Plan and Bylaws (review)
Sherbrooke	Official Plan and Bylaws
Sherwood	Official Plan and Bylaws
Souris	Development Bylaws
Winsloe South	Official Plan and Bylaws (in progress)
Southport	Official Plan and Bylaws (review)
Tignish	Official Plan and Bylaws (review)
Union Road	Official Plan and Bylaws (review)
Warren Grove	Official Plan and Bylaws
Wellington	Official Plan and Bylaws
West Royalty	Official Plan and Bylaws (review)
Wilmot	Official Plan and Bylaws (review)
Winsloe	Official Plan and Bylaws (review)

Additional staff resources were provided to municipalities, local groups and government field staff in a number of projects which are highlighted as follows:

Concept Plan Preparation:

North Lake Tourist Centre
Souris Marina
York Community Hall
Mt. Stewart Fire Hall
Georgetown Park
Southport Recreation Centre
Fortune Recreation Centre
Sherwood Lawn Bowling
Emergency Preparedness Facility
Montague Subdivision Developments
Panmure Island Beach Complex
Montague Waterfront Developments
Green Park Cottage Complex
Kensington Subdivision Developments
Hunter River Recreation Complex
Charlottetown City Hall Site Improvements
Fire Fighters Training Facility
West Prince Farmers Market
Murray River Walking Tours
Wilmot Pooles Corner Designs
St. Peters Day Use Park
Souris Ballfield
Georgetown Subdivision Developments
Souris Arena and Bowling Alley
Alberton Community Recreation Complex

Special Mapping:

Mt. Stewart Fire District
Orwell Wildlife Management Area
Heritage Roads
Eastern Kings Service Area
Cornwall Utility Mapping
Provincial Sugarbush Stands
Cross Roads Fire District
Hillborough Park Utility Mapping
Montague Watershed
Non-resident Ownership Display
Archaeological Site, Greenwich
Borden Groundwater
Georgetown Utility Mapping
Charlottetown Property Map Update
Cavendish Area Mapping

Boundary Extension Projects:

Cornwall-Eliot River
Wellington
Winsloe South

Special Projects:

Recreation Site Planning Workshop Presentation
Community Economic Development Workshop Presentation
Housing Brochure
Fire District Brochure
Municipal Development Guidelines Update

Considerable work has been carried out in special planning areas. Policy recommendations will be submitted to government as a result of the study on Off-Shore Islands in 1988. As well, work is nearing completion on the Cavendish Special Planning Area, leading to an Official Plan for the region. Adoption of the Plan and implementation is expected in 1989.

A study of **Planning Act** Regulations is ongoing.

Provincial Planning Branch

The Provincial Planning Branch was formally established during 1988. Its initial activities were directed to continuing to provide assistance to the Charlottetown and Summerside Area Regional Planning Boards. In addition to this the Branch participated in the latter stages of the review process associated with the 1974 **Planning Act.**

A new **Planning Act** for the Province was proclaimed in May. One of the features of the new Act was the creation of a specific section relating to Provincial Planning. This section provides, amongst other things, for the establishment of provincial land use and development policies as well as expressing the Province's continuing interest in intermunicipal or regional planning matters. The Department's approach in this regard is to continue to assist municipalities in developing strategies for addressing intermunicipal or regional matters on an issue by issue basis.

Within the Greater Charlottetown Environmental District the Charlottetown Area Regional Planning Board completed its six year plan to rehabilitate and

renovate the major streams and creeks within the district. Implementation of this plan has resulted in twenty-six miles of streams and streambanks being improved through Provincial assistance and Federal grants amounting to approximately $930,000.

In consultation with the municipalities in the Summerside Region work continued in 1988 on the establishment of a strategy to ensure a continuing safe and adequate water supply. In addition, discussions continued with respect to the provision of sewer and water services on the "north slope" in the Community of Sherbrooke.

During 1988 the Community of West Royalty, in accordance with the **Planning Act**, submitted the necessary documents for ministerial consideration of approval of a major shopping center. This is currently under appeal before of the Land Use Commission.

Following the announcement by the Province that it would acquire approximately six hundred acres of abandoned railway right-of-way an interdepartmental committee mandated to advise on the future use of the rights-of-way was struck. The Branch participated actively in this review. The Committee reported to Government in October.

The Branch, in concert with the Environmental Management Division, Community Planning Branch, Departments of Tourism and Parks and Transportation and Public Works, Parks Canada and the Cavendish Planning Board developed a strategy for the provision of sewage service in the general vicinity of Cavendish Corner. Central to the plan developed is the new Cavendish Visitors Information Center, construction of which commenced during the year.

An important part of the Branch's mandate is the development of provincial land use and development policy. During the year, in consultation with other departments and agencies of government discussions took place with respect to Official Plan Guidelines policy as provided for under the Act. In addition work commenced on the development of an approach to subdivision policy within the Coastal Zone. As well initial steps were undertaken to establish a process which will result in the assembly and review of land use and development policies of various Departments and

Agencies within the Province. The Branch also took part in the development of draft policy with respect to offshore islands.

In responding to the need to ensure that Prince Edward Island continues to contribute to Provincial, Federal and national land use policies the branch participated in the activities of the Canada Committee on Land Use.

Building and Development Services Branch

The Branch continues to provide inspection and technical advisory services through its Property Development Officers and Plumbing Inspection teams operating out of five Regional Services Centres. An ongoing effort has been made to update standards and promote leadership to ensure continuity in the administration of programs that protect both the consumer and the building industry.

This year once again showed an upswing in the marketplace which, in turn, has created a significant increase in building and development activities thereby substantially producing a strain on the advisory services provided by staff.

To further improve the efficiency of the Division an ongoing program to computerize the recording systems has been introduced. The Fire Marshal's office is already programmed and during the coming year the system will be expanded to encompass the remaining sections of the organization.

The training programs supported by the Fire Marshal's office have continued to play a major role in the training of volunteer firefighters. A site for a new training centre has been selected and should be operative next year. As in previous years, the number of preventive fire inspections has continued to increase due to the demands of other government agencies.

<u>Subdivision Development Section</u>

During 1988 the office received and filed a total of 492 subdivisions. Final approval was granted to 149 of these, containing a total of 186 lots; 225 other subdivisions were filed for record purposes, and represented first single family dwelling or mobile home

lots from previously unsubdivided properties. The Department denied 7 applications, 1 was cancelled by the applicant, and 114 others were either approved in principle, or remained pending for a variety of reasons.

The following is a breakdown, according to use, of the number of lots created by the 149 approvals:

Single family dwelling (including mobile homes used as single family dwellings)	127
Summer cottage	35
Commercial	5
Miscellaneous	19
TOTAL	186

The number of applications filed this year was down slightly compared with 1987. It should also be noted that although the number of summer cottage lot approvals seemed to have decreased substantially, several large-scale developments submitted late in the season were among those still on the pending list at the end of the year; those applications included over 400 additional cottage lots. As a result, the amount of site inspections, consultations with other departments and agencies, and preparation of design concepts for individual applicants continued at a high level.

In 1988, various community councils continued to make use of the office's technical advice and assistance in order to enforce their own official plans and subdivision control zoning bylaws. It is likely that this function of the section will be extended further in 1989 as new communities develop plans and regulations.

Preliminary work has already commenced with a view to computerizing the records of this section in the near future.

Property Development Office

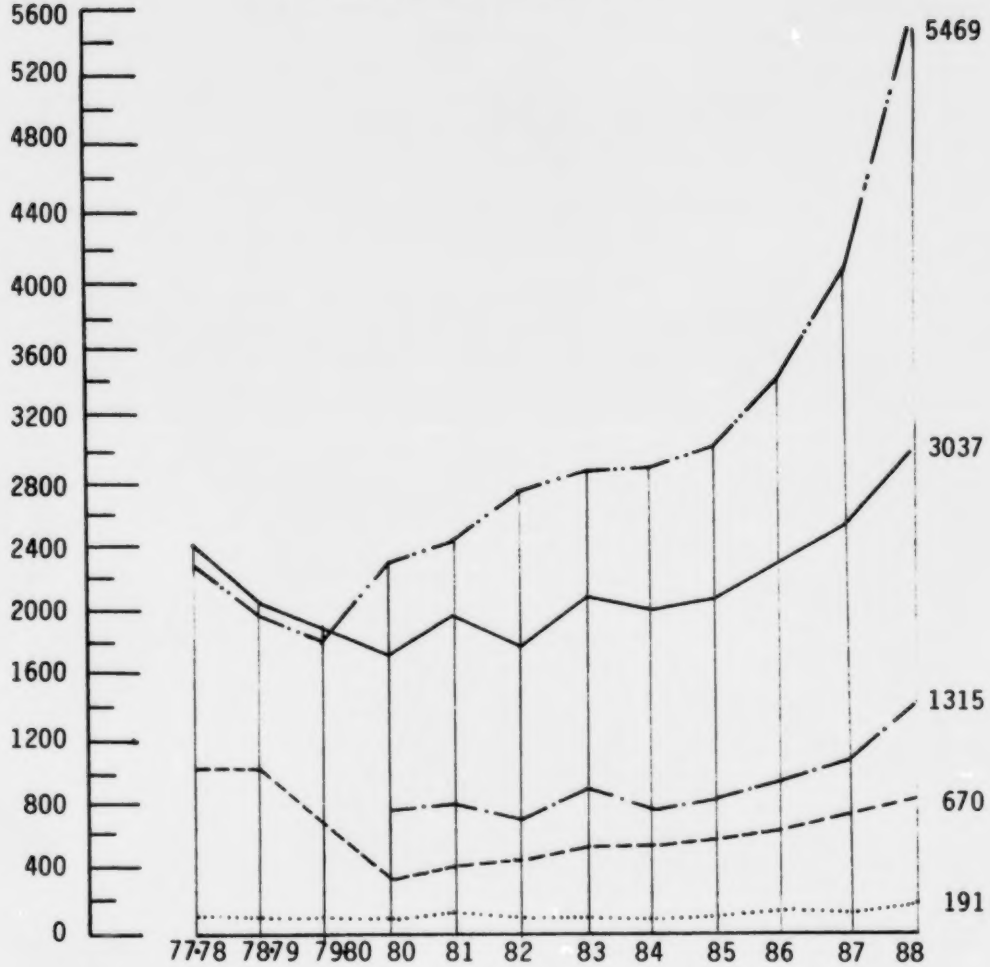
This office administers the **Planning Act** Regulations as they apply to building and the development of individual parcels of land. Inherent to the provisions of these regulations is the responsibility for involving other regulatory authorities, as may be required in the development process. In addition, the Property Development Officers provide administrative support and inspection services to some communities which have adopted official plans and development bylaws.

The office is also responsible for administration of the **Environmental Protection Act** Sewage Disposal Regulations. This service extends to assisting property owners to resolve problems with malfunctioning sewage disposal systems in both rural and incorporated municipalities which do not provide a municipal sewage system.

The Section's workload reached new a new all-time high. In 1988, staff processed 1722 building permits, 1315 sewage disposal system permits, and carried out approximately 5469 inspections. In addition, staff represented the Department at 14 hearings before the Land Use Commission.

PROPERTY DEVELOPMENT OFFICE

Permits & Inspections



——— Total permits issued (includes sewage system permits as of 1980)

—··— Total inspections (includes sewage system inspections as of 1980)

—·—·— Sewage system permits

– – – – – Building permits for dwelling units (includes mobile homes)

····· Building permits for summer cottages

Plumbing Office

The workload of the plumbing inspection team also continues to remain high with staff carrying out over 3717 inspections.

	1987	1988
Permits issued	1041	1,047
Fees collected	$47,459	$53,549

Fire Marshal's Office

During 1988, 55 volunteer firefighters from 30 fire departments received Level I Firefighting Training. A full class was enrolled for our first Leadership Training Course held the first of December.

The office started using a computer during 1988. This new system shows an increase in the number of fires being reported, in that all alarms are recorded, but it will not affect the dollar loss. Hopefully, the computer will decrease the office workload and provide more valuable statistics.

A site has been selected for the new training centre with work scheduled over the coming year.

The new radio communication system is complete and will be of great value to our volunteer fire departments, especially during major fires when mutual aid is being used.

As in past years, it is necessary to estimate our final loss statistics for this year.

	1987	1988 (est.)
Total number of building inspections	1600	1700
Total number of fire investigations	74	120
Building plans reviewed	143	260
Number of fires of incendiary nature (excluding vehicles)	34	50
Total number of deaths	4	2
Total number of fires recorded	558	800
Total number of fires over $100,000	4	2
Total property loss	$4, 435,751	$4,000,000

Derelict Cars and Unsightly Premises Section

Approximately 2119 vehicles were hauled to the 17 provincial storage sites by 3 provincial contractors during this year, resulting in 1991 tons of crushed vehicles being removed from provincial sites, while an additional 3583 tons were removed from private yards. this resulted in a grand total of 5574 tons of scrap metal being shipped to the mainland. The low tonnage from the provincial sites is due to the crushing being limited to 6 yards out of a total of 17. The tonnage for the remaining 11 yards will be shown in the 1989 annual report.

In addition to the foregoing, 14 buildings were demolished, while another 75 buildings were removed by burning under the **Unsightly Property Act**.

	1987	1988
Number of provincial haulers	3	3
Number of provincial storage sites	17	17
Number of private automobile junkyard permits issued	43	38
Cars hauled to provincial storage sites	1909	2119
Crushed cars shipped from Province (measured in tons)		
Provincial sites	3489.08	1191.38
Private yards	2465.15	3582.51

On May 3, 1988, the Lieutenant Governor-in-Council gave Royal assent to an amendment to the **Automobile Junk Yards Act** requiring future automobile junkyards be located 1,000 feet from residential premises.

Municipal Affairs Branch

Throughout 1988, the Municipal Affairs Branch continued to provide financial support and advice to the Province's City, towns, and communities.

One of the primary responsibilities of the Branch is to administer the Provincial Municipal Support Fund Program. In 1988, approximately $3.5 million was allocated to the 89 P.E.I. municipalities.

The Branch also continues to work closely with the Federation of P.E.I. Municipalities and the newly formed Association of P.E.I. Administrators.

A number of co-operative projects were undertaken during the past year, including the following:

* Co-sponsored with the Federation of P.E.I. Municipalities, a series of orientation workshops for newly elected municipal officials. Workshop topics included Municipal Legislation, Municipal/Provincial Legislation, Role of the Council, Conduct of Meetings, Municipal Financing and the Role of the Federation of P.E.I. Municipalities. Workshops were held in each county and the feedback indicated the participants found the sessions to be very informative.

* Assisted the Federation of P.E.I. Municipalities in promoting the second annual Local Government Week Program. This year's theme was "Close to Home". The purpose of the week was again to familiarize residents with the responsibility of their local municipal council and to encourage them to get involved. This promotion was very well received by the municipalities, the media and the general public.

* Conducting a review of the Elections Section of the **Municipalities Act**. This is a joint undertaking by the Branch, the Federation and the Administrators Association. It is proposed that any necessary amendments will be approved during

the 1990 sitting of the Legislature in time for the next general set of municipal elections in November 1990.

Staff Development and Training continues to be a priority concern for both elected and appointed municipal officials. In an attempt to meet these needs, the Administrators Association, the Federation, and the Branch have developed a training schedule for 1989 consisting of a number of one-day workshops/seminars.

In addition to the above one-day courses, Henson College in Halifax is presently developing new two year certificate and diploma courses aimed at meeting the longer term training and development requirements of appointed municipal officials throughout the Maritime Provinces. The Department has contributed financially to the development of these courses and the Branch will be actively involved in monitoring their progress.

The Branch, in co-operation with the Fire Marshal's Office, also continues to work with the P.E.I. Firefighters Association in an effort to strengthen its training program. With assistance from Maritime Municipal Training And Development Branch, a new program addressing the management and administrative needs of P.E.I. Fire Brigades was developed in 1988. This program was offered for the first time in October/November 1988 and was very well received by the approximately 30 volunteer firemen who attended the two weekend sessions.

Another highlight of 1988 was the amendment to the P.E.I. **Fire Prevention Act**. This amendment now permits rural unincorporated areas of the Province to form a fire district for the sole purpose of collecting fire dues. The collection of fire dues in these areas has been a long standing problem for both the residents and the fire brigades. The response to these changes has been very positive, and it is projected that 10 - 12 fire districts will be created in 1989.

Emergency Measures Organization

The Emergency Measures Organization has responsibility for co-ordinating the government's response to peace and wartime disasters. It also investigates and reports all land based spills of hazardous substances.

In order to fulfill its mandate to ensure a high state of emergency preparedness, E.M.O. devotes a substantial percentage of its time to the preparation of emergency plans as well as to training. Exercises to test emergency response personnel and to ensure that emergency plans are valid and appropriate are held throughout the year.

Emergency Plans:

Amendments have been made on all regional, departmental and specific emergency plans. New plans that have been drafted during the past year include:

Communications Plan Amateur Radio
Contingency Plan Hazardous Material Spill Incidents
I.I.S. Island Information Services
Boy Scout Jamboree Plan
Radiation Emergency Response Plan
Cornwall Municipal Emergency Plan
Foreign Animal Disease Eradication Support Plan

Exercises:

Over the past year, several exercises have also been held across the Province to test the operational procedures of emergency response agencies that would normally respond to an emergency or disaster. These exercises include:

Exercise Highroad XI School Bus Exercise held in the O'Leary area

Exercise Highroad XII School Bus Exercise held in the Alberton area

Exercise Highroad XIII School Bus Exercise held in the Kensington area

Exercise Highroad XIV School Bus Exercise held in the Morell area

Exercise White Cloud Transportation of Dangerous Goods Exercise held in the New Glasgow area

Exercise Night Light Transportation of Dangerous Goods Exercise held in the Borden area.

Exercise "COSMOS ALERT" an Island-wide Radiological Defense Exercise.

Training:

Sixty five (65) individuals from various agencies attended the four Transportation of Dangerous Goods courses conducted by the Branch. In addition, approximately 102 volunteer emergency personnel received formal training at the Emergency Preparedness Canada, Federal Study Centre at Arnprior, Ontario.

Emergency Measures Organization is responsible for co-ordinating the selection of candidates for these courses.

Another primary responsibility of the Branch is to promote the development of Emergency Preparedness in P.E.I. by utilizing Federal funding under the Joint Emergency Planning Program (JEPP). This Program was introduced by the Federal Government in 1980 in an effort to promote Federal/Provincial planning and co-operation.

Through the assistance of J.E.P.P., the Branch successfully promoted the following projects:

Basic Ongoing Prince Edward Island Emergency Measures Organization (Peace & War) 5-Year Agreement and Readiness Plan $166,692

Specialized Emergency Training for fire services personnel $50,000

Integrated Mobile Radio Trunking System. Cost shared between Federal and Provincial Governments and Island Telephone $ 3,4809,000

Public Protection, Continuity of Government Management of Plans for Wartime Arrangements. Cost shared between the Federal and Provincial Governments $33,000

Emergency Generator E.O.C City of Charlottetown. Cost shared between Federal and Provincial Governments and the City of Charlottetown. $46,869

Upgrading of P.E.I. Community/Provincial Shelter Plan, Continuity of Government Program. Cost shared between the Federal and Provincial Governments. $78,577

Emergency Generator EOC Souris Hospital. Cost shared between the Federal and Provincial Governments and Souris Hospital. $75,000

Crapaud Mutual Aid Emergency Response Vehicle. Cost shared between the Federal and Provincial Governments and the Crapaud Fire Department. $66,971

The highlight of the past year has been the construction of a Province-wide Integrated Mobile Radio Trunking System. The inability of emergency response teams to communicate directly with one another during an emergency has often been cited as a major concern. This state of the art system has all the features which are necessary to enable emergency teams to provide a more co-ordinated and effective response to provincial emergency situations. The benefits of this system will be evidenced by our volunteer firemen, police officers, forest fire fighters, ambulance operators and many other emergency personnel all across the Island. This system has also been designed to interconnect with other provincial systems and should adequately serve the needs of our Island emergency personnel for many years to come.

ENVIRONMENTAL MANAGEMENT DIVISION

The Environmental Management Division is responsible for the Department's programs and activities relating to the protection and enhancement of the Province's air, water, land, and wildlife resources.

Two important events for the Division during the year were the enactment of a new **Environmental Protection Act** and completion of the Division's reorganization into three key branches: Water Resources Branch, Fish & Wildlife Branch and Waste Management & Utilities Branch. Two staff positions supporting the three branches are the Policy, Information & Assessment Coordinator, and the Comptroller of Licenses.

The new **Environmental Protection Act**, which was proclaimed on June 11, 1988, is designed to strengthen the Province's ability to protect dune and beach areas and to establish an environmental impact assessment process for major new developments.

In recognition of the fact that environmental protection responsibilities are shared with other levels of government, the Division staff participated in activities related to the implementation of the new **Canadian Environmental Protection Act** and on several federal/provincial bodies concerned with regional and national approaches to environmental protection. In October, the Honourable Gilbert Clements assumed the presidency of the Canadian Council of Resource & Environment Ministers and will host the Council in Prince Edward Island in October, 1989.

Waste Management and Utilities Branch

Solid Waste Section

The Section is directly responsible for the operation of three regional landfill sites in St. Eleanors, Sleepy Hollow, and Cardigan, and six rural refuse container sites in Queens County. Another thirty-seven (37) community refuse disposal sites are located across the Island, serving areas of the Province not served by the landfills or the Energy from Waste Plant in Parkdale.

Twenty-nine (29) of the sites are managed by Community Councils or by Community Disposal Site Committees, with funding and technical assistance being provided by the Department.

Two of these sites, Souris and Tignish, have unique agreements between the Department, the community and private contractors to provide management services at the local disposal site.

Two sites, Wood Islands and Murray Harbour, were closed in 1988 after full consultation with the communities involved. The Community Management Committee for the Belfast area felt that two sites in their district were sufficient and they could use their resources more economically by eliminating the site at Wood Islands. In the case of the Murray Harbour-Murray River area, a new site was constructed in the Murray River area. This new site is unique in that no burning is allowed and it will be run as a small sanitary landfill test project.

Staff continues to provide necessary management at the other eight (8) sites although preliminary work has begun to convert these to the community management system.

Approximately forty-five (45) complaints involving the use of private dumps for household garbage, manure storage, fish offal, and similar environmental problems involving municipal solid waste were investigated, with most being resolved in a constructive manner. A total of 142 permits were issued to individuals under the disposal permit system for special waste treatment and/or disposal at the three regional landfills.

The Section represents the Department on the operating committee for the Energy from Waste Plant (EFW) located on Riverside Drive in Parkdale. The Department currently pays a tippage fee of $25 per tonne of garbage treated at the Energy from Waste Plant. The remaining 45% of the yearly revenue for the EFW is received from the sale of steam to the Queen Elizabeth Hospital, Hillsborough Hospital, and the Sherwood Home.

The Energy from Waste Plant serves a population of approximately 45,000 people in the greater Charlottetown area and treated some 32,000 tonnes of municipal solid waste (MSW) this year. This volume of

MSW means that for almost eight (8) months of year the Energy from Waste Plant is at or near capacity of 99 tonnes per day.

On a broader scale the staff has been involved with the Energy Corporation in an extensive study of the existing waste management system on Prince Edward Island, and how this system can be improved to better handle the municipal solid waste generated in the Province, while obtaining the maximum amount of recoverable energy through the disposal process.

In order to keep abreast of new developments, both in technology and regulatory considerations, the Section represents the Province on the National Waste Management Committee established by the Canadian Council of Resource & Environment Ministers (CCREM). The Section was also represented at the 10th Canadian Waste Management Conference held in October in Winnipeg, Manitoba.

The Section is committed to keeping with pace the changing technology and meeting the increased public demands to provide efficient and environmentally sound disposal methods for P.E.I.'s Municipal Solid Waste.

Air Quality & Hazardous Waste Section

Several air quality issues were addressed by this section in 1988. Considerable effort was made to ensure asphalt plants were located and operated in accordance with guidelines adopted by the Department in 1985. In one case, it was necessary for the company to install additional scrubbers to reduce dust emissions and to use low sulphur products to minimize odors.

A fish meal plant at Kinross was authorized in June to construct and operate emission control works. Operational difficulties lead to the issuance of a Ministerial Order in October requiring the company to cease receiving and processing fish products until the emission control works were certified operational by the company's consultant. The certification had not been received by year's end.

During the year Maritime Electric retained a consulting firm to investigate and recommend methods of controlling acid smut emissions from the thermal power

plant in Charlottetown. Based upon tests using magnesium hydroxide the Company plans to install injection equipment in 1989.

Air quality monitoring continued under two federal-provincial joint programs - the National Air Pollution Surveillance Program (N.A.P.S.) and the Long Range Transport of Air Pollutants Program (L.R.T.A.P.), which is chiefly concerned with "acid rain".

The Charlottetown N.A.P.S. station samples sulphur dioxide and particulate matter in the ambient air and provides this information to Environment Canada's national air quality monitoring program. Precipitation (rain) samples are also collected for Environment Canada's program to monitor the long term effect of acid rain.

The first annual report was issued under the Canada/Prince Edward Island Agreement respecting a sulphur dioxide reduction program. Emissions are estimated to be less than half the 1994 annual objective of 5,000 tonnes. Conversion to wood to heating and import of power from New Brunswick are responsible for lowered emission levels.

Work was initiated on regulations governing air quality in the Province. A public consultation process is to be conducted prior to recommending the regulations to Cabinet.

After discussions with the Department, the Canadian Manufacturers Association undertook to survey hazardous waste disposal needs of its members in Prince Edward Island. The results of that survey are now under review by the Section as input for development of a provincial strategy for dealing with hazardous wastes.

During the year advice was provided to several clients on waste disposal options. In two instances a user was found for unwanted or surplus chemicals. The Department is co-ordinating the shipment of the household hazardous wastes to a destruction facility in Quebec with the waste disposal needs of other agencies in the Province. . This will help minimize the cost to each party.

Water Works and Waste Water Section

This Section provides technical assistance to municipalities, industries, commercial establishments, and other agencies with respect to the development, operation, and maintenance of water supplies and waste treatment facilities.

Technical assistance was also provided to Building & Development Services for on-site water and sewage disposal systems for individual lots and subdivision approval. In 1988 approximately 150 sites were inspected for approval of on-site servicing or for existing problems and advice on repairs.

The Section is responsible for the operation and maintenance of provincially-owned water supplies and waste treatment facilities. These include industrial water systems at Montague, Souris, Georgetown, North Rustico, Egmont Bay, Alberton South, and Beach Point. Due to a problem with domestic wells going dry in Georgetown, an extension to the industrial system was installed during the year to service an additional 40 homes. There are now approximately 100 domestic users connected to the system. Similarly, due to well problems in the area there are now approximately 95 homes connected to the North Rustico system. Also, due to an oil spill in the Community of Cross Roads, the Section was called upon to install a new water system to service some 37 homes in the area.

Staff responded to quite a number of requests for technical assistance concerning problems with domestic sewage disposal systems resulting in recommendations being made for repairs to upgrade or replace the system. Improper installation and poor maintenance continue to be the main factors in the malfunction of these systems.

In 1988 twenty septic tank pump truck operators were issued permits for septic tank pumping and sewage sludge disposal. Staff inspected sewage disposal areas and investigated complaints of improper waste disposal.

A weekly sampling program was continued in 1988 to monitor the performance of six municipal and two industrial waste water treatment plants. Package treatment plants servicing tourist facilities, schools, and mobile parks were also monitored. Periodic

inspections of 14 municipal lagoons as well as a seasonal sampling program of the lagoons were carried out during the year.

A number of plans for extension to existing water and/or waste treatment systems were submitted to the Department for review and comment. Under the Environmental Servicing Assistance Program (ESAP) financial assistance was provided to a number of communities for extension of sewer systems. These included Georgetown, East Royalty, Bunbury-Southport, and Tyne Valley. Assistance for studies was also approved for Montague, Souris, Murray River, and Murray Harbour.

Policy Information and Assessment Co-ordinator

This Section provided support to the Department as required in the form of policy development and research into alternative environmental programs and strategies. The Section assisted in the preparation and dissemination of information and education materials aimed at promoting increased awareness and commitment of individuals towards the environment. Planning an environmental assessment process was also initiated.

During the year consultations were held with individuals and organizations to solicit their views as part of the process of developing new environmental legislation. As a result of these consultations a new **Environmental Protection Act** which better addresses today's environmental concerns and problems was presented to the Legislature and proclaimed in June, 1988.

Draft Litter Control Regulations were proposed by the Department pursuant to the **Environmental Protection Act**. As part of the consultation process in preparing new regulations, the draft was forwarded to a number of organizations and individuals for comments.

Hazardous wastes continued to be a primary concern of government and many Islanders. Prince Edward Island Household Hazardous Waste Collection Day, a joint endeavor by the Provincial and Federal Governments and the Environment Week '88 Committee proved to be a tremendous success. A first in Atlantic Canada, the day was established to afford all residents of the

Province an opportunity to bring their old and unwanted hazardous household products to one of six free collection depots for proper treatment and disposal.

Following the PCB fire in Saint Basile-le-Grand, Quebec, the Department took action to ensure that the thirteen PCB storage sites located in the Province met the Federal Government guidelines which were accepted by all provinces through the Canadian Council of Resource & Environment Ministers. The Province also actively pursued the possibility of having the PCB's in storage destroyed.

The Department continued in its efforts to involve the public in participating in and leading environmental projects and programs by co-ordinating with Environment Canada the promotion of the National Environment Week in June. Through funding assistance from the Federal and Provincial Government projects were initiated including a video on Island Natural History, a radio commercial competition, an environmental handbook for municipal leaders, a trail guide, and roadside cleanup.

Requests for information on hazardous wastes, acid rain, and greenhouse effect dominated the type of issues of concern for students and public alike. A number of talks and lectures were given to students across the Island by the Minister and Department staff. Seminars and speeches were also given on several occasions to groups during year, including the Atlantic Planners Institute Conference and the Annual Meeting of Municipal Administrators.

Water Resources Branch

Groundwater Section

The protection and management of groundwater and surface water resources in the Province is a major objective of this Division's activity. Groundwater protection is a vital activity and many of the programs and services of this Section are designed to evaluate, develop, and protect this important natural resource.
Canada-P.E.I. Water Management Agreement

The Federal-Provincial Water Management Agreement, co-ordinated by Water Resources Branch staff entered its second year of work. Projects involving the groundwater segment of the agreement are described below.

a) Water Well Construction Pilot Project

A workshop was conducted in January by personnel from Community & Cultural Affairs, Environment Canada, and Jacques Whitford & Associates for the Well Drillers of P.E.I. to discuss well grouting practices and to outline the pilot project. A preliminary report was received in June from Jacques Whitford and Associates outlining various methods for well grouting to be tested under the program.

The first well constructed under the pilot project was completed in early June of 1988, and 12 more wells have been constructed since that time. Four drilling companies have participated in the program to date with bentonite being emplaced by the following methods: positive displacement method, the bentonite pellet method, by grout pump, and by a method developed using an oversized surface hole.

A brochure outlining the program has been produced and distributed to drillers, regional services centres, and building services personnel. Planning is underway for a controlled test of various grouting methods to supplement data collected from the construction of private wells under the program.

b) Groundwater Resource Evaluation Project

In January a consultant from Jacques, Whitford & Associates was contracted to begin the initial phases of this study, including the development of a ranking system to evaluate the water resources needs of communities across the Island, to begin the collection of relevant information from departmental records, as well as through discussion with community officials. The results of this work are contained in a report received by the Department in June.

During the summer additional information was collected in several communities and sites were selected for test drilling in the communities of Cavendish and O'Leary. Test drilling in Cavendish conducted during the fall consisted of the drilling of 3 test wells with step drawdown tests being conducted on each well and a 24 hour constant rate test. In addition, a survey has been put together regarding water quality concerns in the Community of O'Leary which will be conducted in January. Sites have been selected for three test wells in the Community of Cornwall and tenders are being processed for release in January.

c) Pesticide Sampling Project

Sampling of wells for the pesticides, phorate, disulfoton, and Metribuzin was conducted in October for the pesticides phorate and disulfoton. A total of 100 samples have been collected for these pesticides in areas where these pesticides were used. Some laboratory quality control problems have been experienced with this project and has delayed publication of the results.

Water Quality Programs

Nitrate Survey

There is a growing human health concern about ingestion of nitrates. As a result, a survey of 54 Island wells (18 in each county) in 6 different types of land use was initiated late in the year. This survey will help to determine the impact of various human activities on the concentration of nitrates in groundwater.

Groundwater monitoring for pesticides continued to be a priority. Sampling of wells for the pesticide aldicarb (Temik) was continued with 50 samples collected and analyzed. All private and municipal wells in the Province tested for aldicarb reported acceptable concentrations (less than 9.0 ppb).

A co-operative project with the National Water Research Institute of Environment Canada continued on the underground migration patterns of aldicarb. Observation wells were sampled at the three exploratory sites and some new wells were drilled and pump testing

conducted. A scientific report was prepared on the results of the previous year's work. This study will continue in 1989 and will assist in assessing the environmental fate of this pesticide.

Water quality monitoring continued at the provincial landfill sites at Cardigan, East Royalty, St. Eleanors, and Miltonvale Park. This included sampling of private wells at some of these sites. No significant changes in water quality were observed. Sampling was also conducted adjacent to two community disposal sites at St. George's and Lower Bedeque. Staff also assisted Environment Canada, Water Quality Branch, with the sampling of observation wells at the Charlottetown Airport.

Strong public demand continued for service under the Well Water Quality Program. Bacterial and routine chemical analyses increased by 60%. Request for Water Quality Certification (mortgages) were up from the previous year by 35%. The use of out-of-Province labs doubled due to increased pesticide and petroleum analyses. The staff's workload in terms of problem investigations, interpretation of results and recommendations for corrective measures continued to be heavy. A summary of activity is given in the following table. A new computerized water quality database was developed during the year. This program will give more direct access to the water quality data and allow more statistical manipulation of the data.

SAMPLES COLLECTED

	1988
Bacterial Analyses	5418
Routine Chemical Analyses	2372
Water Quality Certification (mortgage)	1237
Agriculture Research Station Chem. Analyses	1103
Public and Private Wells	884
Landfill Monitoring	119
Out-of-Province Lab. Analyses	289
Dept. of Health Referrals	10

The major water quality problems were contamination by coliform bacteria, nitrates, chlorides, iron, manganese, and petroleum (including benzene). Water Resources staff continued to sample public water supplies at provincial parks, schools, subdivision, municipalities, senior citizen housing units and other locations. Staff also provide technical assistance to the Department of Health & Social Services when a serious water quality problem is experienced at a public establishment. Descriptions of some of the major water quality investigations conducted by the Branch in 1988 follow:

North River:

An extensive investigation was carried out in the North River area along the Trans Canada Highway and MacKinley Drive when it was discovered that the community sewage lagoon was leaking. Aerators placed in the lagoon cells eroded holes in the clay liner. This allowed a substantial amount of sewage to enter the subsurface and contaminate local groundwater. Nine wells in the area were contaminated with coliform bacteria from the lagoon. Following a lengthy period of time one new well was drilled and ultraviolet water purifiers were installed on all remaining private water systems. A temporary water system installed by the community

supplied water to affected residents until the purifiers were installed. Water quality monitoring will continue monthly for the next year.

Kinlock:

Two test wells were drilled for a major subdivision proposal had salt water intrusion and unusually high nitrate levels. The suitable quality water has not yet been confirmed.

Southport:

Four wells were contaminated with bacteria from sewer and surface water infiltration. Most houses are on central sewer.

Montague:

One well was contaminated with road salt as a result of run-off from street. Water quality has since cleared up considerably.

Brudenell:

One well was contaminated with nitrates from run-off at a fertilizer plant. Well reconstruction was recommended.

North Bedeque:

One well was contaminated with bacteria and high nitrates. New well drilled.

Cornwall:

Three wells were contaminated with bacteria from sewer and surface water infiltration.

Kinkora:

Thirteen wells were surveyed for nitrates and bacteria in the Kinkora area. No problems were found.

Canoe Cove:

Three wells were contaminated with total and faecal coliform bacteria from a septic system. Two systems were dyed to try to identify the source. The source

has not yet clearly been identified but a central water system may be the only solution. In the meantime, the well nearest the suspected problem system is to be redrilled.

Gaspe Road, O'Leary:

Two wells were contaminated with coliform bacteria resulting from a sewage backup. Investigation is continuing.

Oyster Bed Bridge:

One well was bacterially contaminated by a pig manure lagoon and confirmed with dye. A new well was drilled and new liner put in lagoon.

Three wells had to be drilled because of salt water intrusion problems.

Shamrock:

An incident of cull potato disposal in a sandstone pit was investigated and resulted in a Ministerial Order being issued due to the potential threat to groundwater. A court order was eventually issued as the responsible party did not comply with the Ministerial Order.

Negotiations for a water quality agreement between the Province and Environment Canada were conducted through a number of meetings. This agreement is nearing completion and would include the establishment of groundwater, surface water, and estuarine sampling stations in a number of watersheds. This will provide a long term water quality monitoring network across the Province.

Well Water Program

In 1988, eight well drilling firms were licensed in the Province. The number of well reports increased slightly from the previous year. A meeting was held with the well drillers to discuss methods of sealing casing.

Well drilling statistics for the province are summarized below.

Well Drilling Statistics	
Well Drilling Licenses Issued	13
Well Permits (for high capacity wells)	36
Areas Restricted for Well Drilling	6
Field Inspections of Drillers	12
Well Drillers Reports Received	855
Design or Supervision of Pumping Tests	10
Salt Water Wells Developed	6
Abandoned Wells Plugged	152
Abandoned Wells Inspected	169
Abandoned Wells Reported	181

Municipalities, consultants, and private industries were given technical assistance for several water supply projects where high capacity wells were being developed. Major projects involved Marine Harvesting in Georgetown, Town of Summerside, Cross Roads, and numerous aquaculture projects.

A strong interest continued in salt water well development for lobster holding, aquaculture, and shellfish culture. Some locations investigated for salt water wells were: Anglo Tignish, Charlottetown, Belle River, Orwell Cove, and Stanley Bridge.

Revisions to the well drilling regulations were initiated during the year. These are expected to be completed in early 1989.

Subdivision Assessment Program

Applications for subdivision or industrial development approval are reviewed by Water Resources Branch to ensure that acceptable quality and quantity of water supply are available for the development and that the development is not a risk to existing water supplies. This review includes evaluation of existing information, supervision of drilling, and field testing as required, and consultation with developers. A total of 87 applications were reviewed during the year.

Underground Tank Program

Staff of the Division continued work on a two-year Federal-Provincial Underground Petroleum Storage Tank (UPST) Management Project. Major efforts in this Program have concentrated on the removal of all UPST's over 15 years old, the inspection of new tank installations, tank removals, and daily inventory records at retail outlets. Statistics on these activities are listed in the following table. A project on disposal of removed underground petroleum storage tanks was launched in conjunction with Environment Canada. One charge for failing to keep daily inventory records was laid and resulted in a fine. The authority to issue tickets under the **Summary Proceedings Act** was granted for some sections of the Petroleum Storage Tank Regulations.

Underground Petroleum Storage Tank Program

	1988
New Underground Tank Installations Inspected	72
Underground Tank Removals Inspected	382
Leaking Underground Tanks Removed	41
Underground Tanks Registered	2306
Inventory Record Inspections	238
Galvanic Monitoring Checks	70
Registered Tank Installers	150

As a member of a National Task Force, P.E.I. participated in the creation of an instruction manual for underground tank installers, a study on underground heating oil tanks, and the preparation of a National Environmental Code of Practice for Leaking Underground Petroleum Storage Tanks. A training course for underground tank installers was held in February in Charlottetown with over 100 people in attendance.

A total of 137 petroleum spills or leaks resulting in 27 wells being contaminated were investigated during the year. Forty-one (41) spills involved underground tank or line leaks.

Brief descriptions of some major petroleum spill investigations and clean-ups conducted during the year were:

Cross Roads:

Underground leakage from two tanks resulted at least 10 private wells being contaminated by petroleum products in the Cable heights Subdivision. This resulted in a hydrogeological investigation conducted by Jacques, Whitford & Associates. A central water system was installed to supply almost 40 dwellings with water. The cost of this project will be in the vicinity of $250,000. Legal action against the responsible party to recover costs is currently being pursued.

Summerside:

There were 3 leaking underground tanks removed at 3 different locations. Contaminated overburden was removed and contaminated groundwater was found. Monitoring wells were drilled at all locations to assess any migration of contaminants.

Commercial Cross:

Approximately 9,500 litres of fuel oil was released when an above ground tank leaked due to corrosion. The dyke around the tank was able to contain only 3,000 litres. The rest of the oil contaminated an area at the back of the property to a depth of 2 to 5 feet. A total of 2,500 yd^3 was excavated. Approximately 1,500 yd^3 was stockpiled on site and is presently being used in an on-site biodegradation project.

Brudenell:

As the result of a private well being contaminated with petroleum, an investigation of a nearby service station was started. This resulted in the removal of several underground tanks including one that had begun to take on water. A total of 9 private and monitoring wells were found to have petroleum contamination in that

area. A hydrogeologist has been hired by the petroleum company to determine the extent of the contamination plume.

St. Louis:

An underground tank that had been leaking product from its feed lines for some time was removed. Four hundred and fifty (450) cubic yards of contaminated overburden was removed. Some of the bedrock was also found to be contaminated. Monitoring wells were drilled but groundwater was not contaminated.

Canoe Cove:

An underground tank was removed where it appeared product leaked from the product lines. Thirty (30) cubic yards of contaminated overburden was removed. Bedrock was also found to be badly contaminated. Three (3) monitoring wells were drilled and sampled and two (2) found to be contaminated with hydrocarbons. A hydrogeological consultant was hired to determine the extent of the contamination plume.

Southport:

Court proceedings were initiated against a company which failed to comply with a Ministerial Order issued as the result of a fuel oil spill. This case is still before the courts and is being challenged under the Canadian Charter of Rights and Freedom.

Marine Environment Section

The objectives of the Marine Environment Section are to investigate problems and to develop management options for the maintenance and restoration of the coastal marine and estuarine resources of P.E.I. The estuary water quality programs funded under the Canada/P.E.I. Water Management Agreement were administered by the Section. The Section is also responsible for the operation of the Community Services Laboratory, the enforcement of the "Sand Removal in a Protected Area Regulation", the implementation of the **Planning Act** Regulations for the control and management of Excavation Pits and the administration of the Watercourse Alteration Permit Program.

Water Quality Investigations

A number of water quality programs and studies were carried out during the past year. These included the following:

A. West River

A detailed investigation of certain physical, chemical, and biological characteristics of the West River system was continued during the past field season. The objective of this Program is to evaluate improvements in the estuarine environmental quality as a result of major modifications to the causeway at New Dominion. It is anticipated that the information obtained from this work will be beneficial in evaluating the effectiveness of similar modifications to other causeway impounded systems on P.E.I.

B. Barbara Weit River

A study was undertaken to evaluate alternatives to alleviate the serious water quality and other environmental problems in the Barbara Weit River, as a result of the input of wastes from the Cavendish Farms Potato Processing Plant at New Annan. The investigation involved the collection of water and sediment samples and other field information during the winter months of 1988. A contract was let to Delcom Consultants of Summerside to study the options and present recommendations to the Department as to the most appropriate course(s) of action. A final draft of the study has been received which includes the principal recommendation that the waste treatment plant be upgraded by the expansion of the aeration and clarification facilities.

C. Sediment Coring Program

An estuarine sediment coring program was carried out in the Wilmot River and Clyde River during the winter of 1988. A total of 20 good quality cores were collected and analyzed for physical and chemical

characteristics. Further assessment of the cores including radioisotopic dating will be carried out in an attempt to determine sedimentation rates and sediment accumulation patterns.

D. Southern Malpeque Bay

A comprehensive study of the bacterial quality of the estuarine waters of Southern Malpeque Bay and feeder streams was undertaken in the fall of 1987 and extended throughout the past year. This study was prompted by the need to understand the variable nature and the extent of bacterial contamination in South Malpeque Bay. The analysis of the data collected will seek to determine the relationship between meteorlogical and hydrological conditions, land use and the level of contamination in the shellfish growing areas of the Bay.

E. Estuarine Water Quality Monitoring (Cardigan River, Boughton River, and St. Peters Bay)

With the rapid expansion of all facets of the aquaculture industry on P.E.I., the need for environmental information including the physical, chemical, and biological characteristics of coastal estuaries has become of foremost concern. Due, in part, to the general lack of oceanographic information, both the suitability of different estuaries for aquaculture and the impact of aquaculture activities is not well described. This project is designed to develop a detailed data base in three major mussel aquaculture areas, including Cardigan River, Boughton River, and St. Peters Bay. Information is being collected on physical oceanography, water chemistry, and biological food supply.

F. Glenfinnan - O'Keefe's Lake

Bi-weekly - monthly monitoring of both lakes has been ongoing for a number of years with its principal objective to evaluate the long term effect of the addition of agricultural

limestone to the lake water to restore and maintain pH levels to the normal range. Following the identification of declining pH levels in O'Keefe's Lake, 40 tonnes of calcitic limestone was applied to the Lake in the fall of 1987. Depressed pH levels are believed brought about due to the high proportion of atmospheric precipitation supplying these lakes.

G. Shellfish Growing Area Surveillance Program

The Federal/Provincial Co-operative Shellfish Growing Area Surveillance Program was active during the summer and fall of 1988. This Program is directed specifically toward the evaluation of the bacteriological quality of shellfish growing waters. Growing areas are classified by Environment Canada in conjunction with a Federal/Provincial Advisory Committee as open, conditionally open, or closed according to strict bacteriological water quality standards. Re-appraisal surveys were carried out in 33 different growing areas during the past field season. Although final evaluation of the data has not been completed, elevated bacteria counts have been found in certain estuaries, particularly during the fall season following rainfall. At the present time there are 83 shellfish closures in effect on P.E.I. One conditionally approved area was operated in 1988 at Mill River. There were no new closures established in 1988.

Community Services Laboratory

The Community Services Laboratory operated by this Section deals primarily with the chemical and microbiological analysis of water, wastewater, and food products for several government departments and agencies as well as the general public.

The following Table provides a summary of the number of analyses carried out for each of the user agencies during the year. The number of chemical analyses are presented in two categories, those carried out at the

Community Services Lab (CSL) and those carried out by Community Services Lab staff at the Department of Agriculture Laboratory (Ag. Lab).

Type of Analysis	Env. Management Division	Dept. of Health	Other Users
Water (Microbiological)	6591	3328	1182
Water - C.S.L. (Chemical)	3981	200	1575
- Ag. Lab	3226		
Food		409	
Dairy Products (Microbiological)		100	
Dairy Products (Chemical)		100	
Env. Swabs		226	
Waste Water	2974		3
Soil	1203		
Chlorophyll/ Suspended Solids	3400		

The total laboratory output showed an increased of approximately 20% over last year.

Laboratory staff attended a training workshop to become familiar with up-to-date laboratory procedures.

Shore Zone Sand Removal

The extraction of sand from Prince Edward Island beaches for use in the commercial manufacture of concrete showed only a slight decline compared with the 1987 figures. During the year a total of 32

permits were issued at 19 different removal locations throughout the Province. The estimated quantity removed was 41,000 cubic metres compared to 42,000 for the previous year.

There was some public opposition to the sand removal program in certain areas, particularly in the Skinners Pond and Gascoigne Cove areas. The Environmental Advisory Council mediated in the dispute with the people of Gascoigne Cove. They also hired an independent expert to evaluate existing government policy with regard to sand removal in that area.

A severe storm in late November caused serious erosion damage to much of the Island coastline, including some of the removal sites. Each site will be evaluated in detail prior to the next field season.

Excavation Pit Permit Program

This Program was active during the past year. There are 190 permitted pits in existence in the three counties at the present time. There was one successful prosecution under the regulations during the year for operating an excavation pit without a permit.

Watercourse Alteration Permit Program

A new **Environmental Protection Act** was proclaimed in June, 1988. The Act provides the authority to control any type of watercourse or wetland alteration. Before undertaking an alteration of any kind the proponent is required to obtain a watercourse alteration permit.

During the year 96 applications were received. Of this number 10 were rejected while 15 proposals are still under review.

Two meetings of the Watercourse Alteration Review Committee were held. Work is underway in the development of a Watercourse Alteration Manual for distribution to perspective developers.

Other Activities

Twenty-two (22) dredge spoil disposal applications were reviewed during the course of the year. A number of on-site inspections of disposal sites were carried out with Public Works Canada.

The Section staff were active during the year in a number of programs related to shoreline erosion. A number of coastal erosion problems were investigated at the request of property owners. Initial plans have been laid with the National Research Council to hold a Coastal Erosion Workshop on P.E.I. in May, 1989.

An erosion rate map of the entire coastline of P.E.I. was completed this past summer. This information is made available to the general public upon request.

Three meetings of the Maritime Shellfish Growing Area Classification Committee were attended and several meetings of the P.E.I. Working Group on Shellfish were held during the year to deal with matters related to the surveillance and classification of shellfish growing areas.

An International Conference on Water Quality and Shellfish Testing Procedures and Standards was attend in August, 1988.

Staff of the Section were actively involved in the Co-ordinating Committee and several Technical Advisory Committees related to the administration and supervision of projects under the Canada/P.E.I. Water Management Agreement.

Fish and Wildlife Branch

Programs and activities of the Fish and Wildlife Branch are directed at providing recreational and economic opportunity through the conservation, protection, and enhancement of the Province's wildlife and sport fish resources.

Interest and enjoyment in these renewable resources is shared by a majority of the population. In addition to the obvious importance of fish and wildlife to anglers, hunters, and trappers, a 1981 Canada-wide survey determined that 77% of Islanders surveyed enjoyed wildlife in non-consumptive wildlife-related activities such as watching, feeding, studying, and photographing wildlife. The survey further determined that 78% felt it was important to maintain abundant wildlife populations.

Approximately 20,000 angling, hunting, and trapping licenses are purchased annually. This figure does not represent the true participation of anglers and hunters due to a license exemption afforded resident commercial fishermen and their spouses, resident farmers and farm labourers and their spouses, and individuals under sixteen years of age.

This report summarizes projects and activities in the major program areas of the Branch.

Fisheries

The Fish and Wildlife Branch is responsible for the maintenance and management of over 90 dam sites in the Province. Minor repairs were made to several structures in 1988, including: Gordon's, Montrose; Rackham's, Wheatley River; Knox's, Montague; Grigg's, Ellerslie; Barlow's, Wellington, and Scales', Freetown.

Major repairs were carried out at Larkin's, Naufrage, and Arsenault's, Tignish.

A new fishway and weir were constructed at Leard's, Coleman, with the major share being assumed by Ducks Unlimited and the Department of Transportation and Public Works. This will result in opening up several miles of stream for andromous fish passage on the Trout River.

In an effort to assess the use of fishways by anadromous fish species and to provide data on the timing and size of sea-run populations, fish traps are installed at several fishways on an annual basis. During 1988 traps were maintained at Grigg's, Ellerslie; Robinson's, Tyne Valley; Scales', Freetown; Millar's, Kelvin; Hardy's, York; Officers's, Suffolk; Knox's, Montague; Maritime Electric, Valleyfield, and Leeco's, Pt. Pleasant. The co-operation and assistance of Fisheries and Oceans Canada and Montague Watershed staff were essential to this effort.

The Branch co-operated with several community organizations in the implementation of stream improvement projects by providing advice and materials. Streams worked included: Trout River in West Prince; Dunk River in Freetown; West, North, Clyde and Wheatley

Rivers, plus several other small projects. Most of these projects received assistance from the P.E.I. Conservation Strategy.

High quality trout fisheries at O'Keefe's and Glenfinnan Lakes were supported again in 1988 with the stocking of fall fingerling trout from the Cardigan Salmonid Enhancement Centre. In addition, water quality at both lakes was monitored on a continuing basis in co-operation with the Marine Division. The pH levels were found to be acceptable for fish.

In addition to the stocking of Glenfinnan and O'Keefe's Lakes, approximately 5000 rainbow trout were released in gravel pits in Bedford.

In an effort to improve angling opportunities, approximately 24,000 yearling brook trout were stocked at 30 pond sites in various areas of the Province in 1988. In addition, 14,000 fall fingerling brook trout were stocked at 12 different pond sites. Fall fingerlings were progeny of wild fish collected from the Montague, Hunter, and West Rivers.

The Fish and Wildlife Branch continued to support Fisheries and Oceans Canada's salmon enhancement program in the Province by providing manpower to assist in the rearing of fish at Cardigan, and in the monitoring of returning adult salmon to the Morell River. Fisheries and Oceans Canada continued its programs of semi-natural rearing at Profitt's Pond, Bloomfield, and of smolt releases in the Morell and Mill Rivers. Results of the 1987 smolt release in the Morell River proved most encouraging with over 1600 grilse returning from early July through November 1988. In addition, 85 salmon passed through the fish trap at Leard's Pond.

Surface Water Inventory

A major three-year inventory of water systems within the Province was initiated in the fall of 1987 in co-operation with Environment Canada - Inland Waters Division. This project will result in an up-to-date compilation and mapping of many of the parameters affecting stream quality in most major watersheds and allow government to make informed decisions on projects which may affect surface water resources. Several informational brochures are being prepared for general

distribution and comprehensive watershed manuscript reports are in the final stages of preparation for the Hillsboro and Montague watersheds. A time sharing agreement was negotiated with the Forestry Division which will provide for the entry of watershed data on a Geographic Information System.

In addition, two interns from the Atlantic Centre for the Environment assisted the program in preparing a slide talk, information brochure, and a management plan for the Clyde River.

Upland Game

Habitat management continues on Branch properties across the Island in co-operation with P.E.I. Forestry Division. In addition, the services of a forest technician were continued through Conservation Strategy funding. This individual is responsible for the preparation of management plans for Branch managed land. These plans will serve as a useful guide in the future management of our woodlots. Management plans are concentrating on integrating wildlife habitat objectives with forest management. Accessibility for recreational use is also of prime concern.

In 1988 management activities on Branch managed land included the planting of 6 acres with black spruce, larch, red pine, and poplar; the preparation of 19 acres for planting in the St. Chrysostome area; the surveying and marking of 11 kilometers of boundaries in the Forest Hill Wildlife Management area, while several small firewood cuts were made available to the public.

The Co-operative Pheasant Rearing and Release Program with the P.E.I. 4-H Council was continued in 1988. Twelve (12) groups of 2 to 3 members each were given approximately 25 pheasants to rear and release. The following 4-H Clubs were involved in 1988: Millview-Vernon River, Cherrycliffe, Cavendish, Little Pond, Albany, Brooklyn-Heatherdale, Mermaid-Mt. Herbert, and Orwell.

As in past years, the Earnscliffe Shooting Preserve was provided with technical and financial assistance for its pheasant rearing and release operations. The preserve offers residents and non-residents the opportunity to pursue pheasants under natural field conditions.

The Branch co-operated with the Souris Branch of the P.E.I. Wildlife Federation in obtaining 24 wild, trapped, sharp-tailed grouse for release into the wild in Prince Edward Island. Birds were obtained from Saskatchewan and released in the Clearsprings area. In the spring of 1989, the release area will be intensively surveyed for bird survival. This bird, if successfully established, will be a valuable addition to the avi-fauna of P.E.I.

Forty (40) ring-necked pheasants (wild stock) were obtained from the border region of Nova Scotia and New Brunswick and released in southeastern Queens County. This area will be surveyed in the spring of 1989 to assess survival and breeding success of these birds.

Migratory Birds

The Waterfowl Habitat Management Program consists of the development and enhancement of wetlands for both wildlife habitat and public use. For the past 18 years, Ducks Unlimited Canada, in co-operation with the Fish and Wildlife Branch and private landowners, have developed and improved 98 marshes on Prince Edward Island, totalling 5834 acres and including 167.3 miles of shoreline. During the year, 3 projects totalling 62 acres and 3.6 miles of shoreline were developed.

The Branch continued to sow wild rice seed on newly flooded impoundments and assessment of previous plantings continued. The program to provide wood duck box plans and information to groups and individuals continued in 1988. The Branch also erected new boxes and maintained and replaced old ones in a number of wetlands during the year.

The waterfowl breeding pair and brood survey was conducted again in 1988. The survey provides an annual index of waterfowl production for wetlands across the Province and aids in regulatory management decisions. The survey is conducted co-operatively with the Canada Wildlife Service, with the Service providing supplementary field crews and data analysis services. An analysis of data collected over the past 5 years indicates the need for regulatory changes designed to enhance the survival of locally produced black ducks.

The Branch co-operates with the Canadian Wildlife Service and the Atlantic Waterfowl Council in banding waterfowl to determine migration routes, harvest patterns, and mortality rates for ducks and geese. Division staff were involved in banding waterfowl that overwinter in the Province. The results of this winter banding are summarized below.

SUMMARY OF WINTER BANDING

PRINCE EDWARD ISLAND

1988*

SPECIES	SEX			TOTAL
	MALE	FEMALE	UNKNOWN	
Black Duck	138	51	-	189
Mallard	3	-	-	3
Black X Mallard Hybrid	5	-	-	5
TOTAL	146	51	-	197

*Period of Banding: 02-03-88 through 03-03-88

Efforts were also directed at banding locally produced ducks (black ducks, blue-winged teal, green-winged teal, pintail, and ring-necked ducks). A total of 49 local ducks were banded during July and August with the assistance of the Canadian Wildlife Service.

The Canada Goose Banding Program continued during 1988 at Orwell Cove Wildlife Management Area in co-operation with the Canadian Wildlife Service. A total of 164

geese were banded and neck collared to determine migration patterns and local movement (92 in spring, 73 in fall).

The banding program also includes activities related to migratory birds other than waterfowl. Thirty four (34) young ospreys were banded in a continuing effort to gain information on migration patterns and mortality factors for young fledged from Island nest sites. This brings the total number banded over the years to 308. In addition, 8 bald eagles were banded in 1988.

Open water around the bays, estuaries and rivers of P.E.I. provides winter habitat for waterfowl. Post hunting season surveys are conducted in January by states and provinces in the Atlantic flyway to determine the status of waterfowl populations. In mid-January 1988, 2260 Black Ducks, 1778 goldeneyes, and 575 mergansers, as well as a number of old-squaw, mallards, and Canada geese were observed during the mid-winter waterfowl inventory flight.

P.E.I. Fish and Wildlife Branch co-operates with the United States Fish and Wildlife Service in conducting the Periodic Goose Survey in mid-November. A total of 17,000 Canada geese, 10,600 black ducks, 3600 goldeneyes, 2700 mergansers, as well as a number of incidental species, was observed around the P.E.I. coast during the 1988 fall aerial survey.

The Branch, in co-operation with the Canadian Wildlife Service, developed a Provincial Waterfowl Management Plan to conserve and enhance waterfowl populations and their habitat for the benefit of future generations.

To fulfill the habitat mandate under the North American Waterfowl Plan, the Eastern Habitat Joint Venture was initiated with "first step" projects in five of the eastern provinces in 1988. The Grovepine-Big Brook, the Island's project located in Eastern P.E.I. will involve the purchase of a 1200 acre block of important wildlife habitat. Securement and development of the area will be jointly funded by the U.S. Fish and Wildlife Foundation, the Canadian Wildlife Service, Ducks Unlimited, and the P.E.I. Fish and Wildlife Branch; Wildlife Habitat Canada will serve as broker for the U.S. money.

The breeding status of the woodcock, an important game bird species in eastern North America, is conducted annually throughout its range. Results of Prince Edward Island's survey indicate an increase in the breeding index of 34% in 1988. This conforms to the general pattern in the Maritime Region.

Surveys of all cormorant colonies were conducted in 1988 in a continuing effort to monitor changes in the status of both species to determine future management needs.

Wetland Protection and Enhancement

A Co-operative Wetlands Program, funded by Wildlife Habitat Canada, Ducks Unlimited, Canadian Wildlife Service, and the Province, initiated in 1987, continued. In 1988 waterfowl migration and wintering habitats were identified and a program for conservation of these areas proposed.

In keeping with a recommendation of the P.E.I. Conservation Strategy, the top ranking waterfowl migration habitat in the Province, Malpeque Bay, was declared a "Wetland of International Importance" by the Federal Minister of the Environment under the terms of the Ramsar Convention on June 5, 1988. Eight (8) waterfowl production marshes were improved in 1988 at a cost of $245,000, while 41 waterfowl production habitats in Kings county were assessed, with proposed improvements for increased production of waterfowl and other wildlife described. Similar assessments of production habitat in queens and Prince Counties will take place in 1989 and 1990, and implementation of conservation measures in all waterfowl habitat will continue for the remaining four years of the Program. In 1988, the Program was supported by four students hired through the auspices of the P.E.I. Department of Industry, Employment Canada, and the Charlottetown Ducks Unlimited Club.

Furbearers

Branch staff continued to monitor, develop, and improve the wild fur industry in the Province through trapper education, research, and management. Total value of wild fur exported from the Province for the 1987-88 season decreased sharply due mainly to the substantial reduction in fur prices. The following tables

summarize the annual harvest since 1978-1988, and the average price and value of fur harvested by species for 1986-1987, with deviations from the 10-year average noted.

Annual Wild Fur Harvest and Value in P.E.I.
1978 - 1988

SPECIES VALUE	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
Beaver	254	243	390	327	700	289	378	476	485	538	530
(value)	(5,380)	(10,080)	(19,399)	(10,284)	(13,454)	(5,699)	(7,311)	(14,580)	(21,272)	(20,611)	(17,490)
Muskrat	7,986	7,257	5,788	7,661	7,563	8,527	9,886	8,964	7,269	6,083	5,712
(value)	(43,124)	(40,131)	(53,192)	(70,864)	(47,496)	(35,302)	(57,339)	(51,274)	(31,547)	(36,992)	(35,072)
Red Fox	660	724	964	791	965	995	994	1,140	892	939	722
(value)	(41,336)	(90,051)	(90,964)	(78,127)	(77,538)	(68,794)	(79,013)	(69,962)	(46,268)	(62,753)	(30,093)
Silver Fox	44	32	38	37	26	49	46	27	30	34	33
(value)	(3,547)	(5,832)	(6,486)	(7,194)	(4,052)	(6,891)	(6,785)	(4,730)	(3,351)	(4,766)	(3,955)
Cross Fox	88	96	118	81	118	119	85	85	46	61	34
(value)	(10,944)	(15,151)	(17,671)	(10,474)	(14,801)	(15,278)	(10,614)	(11,367)	(3,391)	(5,859)	(2,343)
Raccoon	1,435	1,609	2,001	1,730	2,024	1,336	1,119	1,405	1,284	1,473	1,510
(value)	(33,464)	(49,977)	(58,329)	(43,527)	(46,754)	(20,788)	(16,673)	(27,187)	(25,192)	(31,611)	(16,535)
Mink	815	911	805	944	909	635	718	1,147	866	865	809
(value)	(11,459)	(22,611)	(17,042)	(22,788)	(20,507)	(11,297)	(17,620)	(31,370)	(21,355)	(33,242)	(29,529)
Red Squirrel	82	63	84	62	106	63	210	84	57	74	32
(value)	(121)	(64)	(83)	(54)	(60)	(47)	(76)	(34)	(12)	(21)	(18)
Weasel	18	96	12	29	76	10	15	45	24	36	26
(value)	(24)	(115)	(10)	(12)	(71)	(11)	(24)	(79)	(27)	(51)	(11)
Skunk	1	5	26	7	17	-	-	-	-	-	2
(value)	(3)	(14)	(53)	(19)	(44)	(-)	(-)	(-)	(-)	(-)	(4)
TOTAL VALUE	$149,402	$234,026	$263,429	$243,343	$224,777	$164,107	$195,453	$210,583	$153,212	$202,227	$135,456

1987-88 P.E.I. FUR HARVEST, COMPARISON WITH PREVIOUS YEAR AND 10 YEAR AVERAGE

	1987-88			1986-87			10 Year Average 77-78 thru 86-87			1987-1988 from 1986-1987%	1987-1988 from 10 Yr. Average
	Number	Value	Average	Number	Value	Average	Number	Value	Average		
Beaver	583	17,490	32.51	538	28,611	53.18	408.0	13,607	33.35	0%	+ 32
Muskrat	5,712	35,072	6.14	6,083	38,992	6.41	7,698.4	46,926	6.10	- 6%	- 26
Red Fox	722	30,093	41.68	939	62,753	66.83	904.4	70,481	77.93	- 23%	- 20
Silver Fox	33	3,955	119.84	34	4,766	140.19	36.3	5,363	147.75	- 3%	- 9
Cross Fox	34	2,343	68.90	61	5,859	96.05	90.9	11,575	127.33	- 44%	- 63
Total Fox	(789)	(36,391)	(46.12)	(1,033)	(73,378)	(71.03)	(1,031.6)	(87,419)	(84.74)	- 24%	- 24
Raccoon	1,510	16,535	10.95	1,473	31,611	21.46	1,521.6	35,350	23.23	+ 3%	- 1
Mink	809	29,529	36.50	865	33,242	38.43	861.5	20,929	24.29	- 6%	- 6
Red Squirrel	32	18	.56	74	21	.29	89.5	57	.64	- 57%	- 64
Weasal	26	11	.42	36	51	1.42	36.1	42	1.17	- 28%	- 28
Skunk	2	4	2.00	-	-	-	5.6	13	2.38	-	- 64
Coyote	1	35	35.00	-	-	-	-	-	-	-	-
		$135,456			$206,227			$204,343		- 34	- 34

This was the second year for mandatory education for all first-time trappers. Three courses (one per County) were conducted in October, with a total of 17 new trappers receiving certification. Courses are conducted jointly by the P.E.I. Trappers Association and the Fish and Wildlife Branch.

Although valuable for fur and, more importantly, for creating valuable wetland habitat, beaver populations must be properly managed to prevent over population and subsequent damage to roads, woodlots, and agricultural land. Information on sex, age, and reproduction is collected annually for beavers harvested, and used in conjunction with population indices and harvest figures, to determine annual trapping seasons.

Although the proportion of kits from the 1987-88 trapping season sample was low (32.5%) indicating low reproduction in 1987, the census of active beaver colonies conducted during the fall of 1988 indicated an increase of 20% over the previous survey.

During the year, Fish and Wildlife personnel continued to co-operate with Department of Transportation and Public Works staff in the control of beavers at highway-stream intersections throughout the Province. In this regard, 1988 was a busy year.

Co-operative Watershed Management

In August 1986 a comprehensive program of land and water management was proposed to Wildlife Habitat Canada by the P.E.I. Fish and Wildlife Branch. The 5-year pilot project was designed to demonstrate to landowners and land resource agencies, the multiple benefits of co-operative land use management. The program continues to be supported by some 25 agencies with contributions including in-kind clerical and technical services, labour, materials, equipment, and professional expertise.

During the early stages of the program, the problems and potentials of wildlife habitat in the Montague watershed were recorded and recommendations for improvement were developed. 1988 marks the second year of Phase II during which the management group initiated goal oriented measures to improve deteriorated sport fish and wildlife habitats.

The objectives of the program and progress toward them are summarized in the following table. In addition to these "tangible" improvements, a monitoring program is being carried out to assess and evaluate the effectiveness of improvements on fish and wildlife populations.

Summary I Current Status of the Management Objectives, Activities and Goals for the Co-operative Watershed Management Project. Interim Reporting Period to September 30, 1988.

Habitat Component	Management Objective	Annual Goal	Project Goal (5 year)	Interim Period April 1-Sept. 30 1988	Accumulative Total Sept.30, 1988
Hedgerow	Establishment	10 km	38.5 km.	11.45 km	19.95 km.
	Rejuvenation	30 km	90 km	-	-
Stream Improvement	Stream cleaning	5 km.	25 km.	12.7 km.	20.3 km.
	Habitat improvement	Log deflectors	as required	8 km.	-
		Weirs	as required	1	1
			as required	1 (Valleyfield R)	1
		Baffles	as required	2	2
		Gabion deflectors	as required	12	12
		Braided channel diversions	as required	5	5
		Pool diggers	as required	6 (Valleyfield R.)	6 km.
	Instream catchment basins	4	4	-	4 km.
Riparian Zone	Tree salvage	5 km.	25 km.	8 km.	-
Management	Reforestation	5,000 hardwood	25,000	-	1,500 hardwoo
		5,000 softwood seedlings	25,000	4,347 softwood	10,847 softwoo
	Bank Stablization	6 km. highway grass mix	as required	12.7 km.	20.3 km.
		Reed canary grass	25 km.		
	Fencing	1.0 km.	3 km.	0.3 km.	2.3 km.
Forest Management	Harvesting	Softwood .80 ha.	300 ha.	50 ha.	94.2 ha.
		Hardwood . 5 ha.	25 ha.	2 ha.	5.0 ha.
		Mixwood .15 ha.	75 ha.	12 ha.	9.3 ha.
	Stand Improvement	Commercial .20ha. hardwood	100 ha.	-	9.0 ha.
		Commercial . 5ha. softwood	25 ha.	-	1.8 ha.
		Precommercial .5ha softwood	25 ha.	-	-
		Precommercial .10ha softwood	50 ha.	3.85 ha.	9.85 ha.
	Road Construction	5 km.	as required	3.0 km.	7.6 km.
	Bridge Construction	2	as required	-	1 km.
	Plantation Maintenance	20 ha.	as required	30.0 ha.	31.0 ha.
	Boundary Line establishment	5 km.	as required	4.0 km.	6.52 km.
	Site Preparation	60 ha.	as required	22.0 ha.	82.7 ha.
	Re-forestation	60 ha.	as required	14.43 ha.	36.8 ha.
	Culvert Installation	2	as required	2	3
Highway Improvements	Erosion control	Roadside sediment trap	as required	8	13
		Diversion channel	as required	2	2
		Hydroseeding	as required	2.5 km.(roadside)	4.0 km.
Agriculture	Soil and Water conservation	Diversion terracing	.1 5	-	1
		Tile drainage	.1 5	-	10
		Outlet stablization	.1 5	-	-
		Grass waterway	.1 5	-	1

Land Acquisition

A 40 acre parcel of marshland was purchased in the Martinvale area of Kings County. This purchase consolidates a large block of marshland on the upper reaches of the Morell River known as the Big Indian Marsh.

Firearm Safety

In 1988 there were 20 firearm safety courses conducted on Prince Edward Island. These courses were conducted in community schools, regional high schools (as part of class curriculum) and weekend courses offered prior to the opening of the hunting season. Of the 421 students who enrolled, 397 successfully completed the course, 15 failed, while 9 did not write.

As well, 1 bowhunter course was conducted with 6 individuals participating.

A workshop focusing on teaching techniques and lesson plans was held at Camp Riverdale with volunteer instructors in attendance. Two (2) U.S. Firearm Safety Specialists were in attendance to lead the workshop.

There were no fatal hunting accidents in Prince Edward Island in 1988.

Enforcement

Enforcement in 1988 resulted in 60 violations being registered by enforcement staff under the various acts regulating conservation and protection of fish and wildlife in the Province. A summary of violations for the past 5 years is presented below.

VIOLATION SUMMARY FOR THE PERIOD 1984 - 1988 INCLUSIVE

VIOLATION	1984	1985	1986	1987	1988
Fishing without a license	5	6	12	21	11
Fishing while suspended	-	2	-	1	-
Fishing out of season	2	9	4	1	-
Fishing with more than one line	4	4	2	3	1
Untagged salmon	-	-	-	-	1
Jigging for sports fish	1	-	1	4	-
Net with no license	1	-	-	-	-
Hunting without a Provincial license	6	-	-	2	3
Hunting out of season	4	-	3	3	2
Hunting without a Federal permit	-	-	1	5	2
Hunting while suspended	-	-	1	-	3
No firearm safety certificate	-	2	2	5	1
Transferring of license	-	1	-	-	-
Hunting on Sunday	-	1	1	-	-
Hunting in Wildlife Management Area	-	-	4	-	-
Loaded firearm in vehicle	2	2	6	1	1
Exceeding daily bag limit	1	1	4	3	1
Baiting of waterfowl	3	1	7	4	9
Hunting with more than one shotgun	-	-	1	-	-
Hunting with unplugged shotgun	3	3	3	2	1
Illegal possession of migratory birds	-	1	-	-	-
Illegal possession of protected species	-	-	-	-	1
Illegal transport of migratory birds	1	-	-	-	-
Trapping without a license	-	-	-	1	-
Traps out after close of season	-	-	-	-	1
No fur dealers license	-	-	2	-	-
Trapping our of season	4	2	2	1	-
No tags on snares and traps	3	1	1	3	-
Trapping within 10 ft. of beaver house	-	-	-	2	-
Trapping within a Provincial park	-	-	1	-	-
Failing to exhibit beaver carcass	-	-	1	-	-
No permit for green hides	3	2	1	-	2
Shipping fur with export permit	-	1	1	-	-
Trespassing	-	-	1	-	2
Giving false information	2	-	4	5	3
Obstructing Conservation Officer	1	1	-	1	1
Assault Peace Officer	-	4	-	-	1
Pesticides too close to a stream	-	2	1	-	7
Motor vehicle on sand dune	-	-	-	-	1
Littering highway	-	-	2	-	-
Illegal excavation pit	1	2	2	2	-
No stream alteration permit	-	-	-	1	-
Off-highway vehicle on highway	-	-	-	-	1
Off-highway vehicle not registered	-	-	-	-	2
Carrying restricted weapon	-	-	-	-	1
Possession of narcotics	-	-	-	-	1
Totals	47	48	71	71	60*

*To November 1988